DOCUMENT RESUME

ED 064 474 VT 015 434

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TITLE Evaluative Study Design, Phase I of the Secondary

Schools Project for an Introduction to the Allied

Health Professions.

INSTITUTION California Univ., Los Angeles. Div. of Vocational

Education.

SPONS AGENCY Office of Education (DHEW), Washington, D.C.

REPORT NO CVTE-000002

PUB CATE Feb 71

NOTE 34p.; PAES Collection

EDPS PRICE MF-\$0.65 HC-\$3.29

DESCRIPTORS Curriculum Design; Developmental Programs;

*Evaluation Techniques; *Health Occupations; Learning Experience: *Pilot Projects: *Program Effectiveness;

*Program Evaluation; Secondary Grades; Student

Participation: Vocational Education

IDENTIFIERS Beginning Competence

ABSTRACT

ERIC

This pilot project, intended to introduce secondary students to health occupations, includes a curriculum that is being designed for replication in secondary schools throughout the nation. Evaluation of the project is intended to provide a valid means of curriculum adjustment. This document presents the proposed research design to be used for evaluating the first year of the project. During the first year, 100 tenth grade students were exposed to a broad range of health-care occupations; they will proceed to a work-experience assignment during the second year, and will be assisted in finding employment on a half-time basis during the third year. Since the functions of students, teachers, other staff members, and the cooperating institutions have been of primary concern in the implementation stage, this evaluation seeks information from them. Data concerning the following are to be used: (1) student participation in the program, (2) learning experiences afforded participants, (3) general quality and effectiveness of the program, and (4) student progress toward achievement of stated performance objectives. (GEB)

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SECONDARY SCHOOLS PILOT AND DEMONSTRATION PROJECT

EVALUATIVE STUDY DESIGN, PHASE I OF THE SECONDARY SCHOOLS PROJECT



USOE RESEARCH AND DEMONSTRATION

GRANT 8-0627

UNIVERSITY OF CALIFORNIA, LOS ANGELES

DIVISION OF VOCATIONAL EDUCATION

ALLIED HEALTH PROFESSIONS PROJECTS

FEBRUARY, 1071

UNIVERSITY OF CALIFORNIA, LOS ANGELES Division of Vocational Education

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Research and Development Project for Curricula
and Instruction in Allied Health Occupations

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EVALUATIVE STUDY DESIGN, PHASE I

OF

THE SECONDARY SCHOOLS PROJECT

FOR

AN INTRODUCTION TO

THE ALLIED HEALTH PROFESSIONS

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UNIVERSITY OF CALIFORNIA, LOS ANGELES
Division of Vocational Education
ALLIED HEALTH PROFESSIONS PROJECTS

FEBRUARY, 1971

This publication was prepared pursuant to Contract No. OEG-8-080627-4672(085) with the Office of Education, U. S. Department of Health, Education, and Welfare. Points of view or opinions were developed on the basis of advisory committe suggestions and survey data. They do not, therefore, necessarily represent official Office of Education position or policy.

FOREWORD

The Allied Health Professions Secondary Schools pilot project is intended to introduce high school students to the allied health occupations. The curriculum for this program is being designed so that it can be replicated in secondary schools throughout the nation.

Evaluation is an important adjunct to the introduction of an allied health curriculum in the secondary schools. Critical and continued evaluation of the present project will permit a basis upon which accountability factors can be identified, and provide a valid means of curriculum adjustment.

Melvin L. Barlow Principal Investigator and Project Director

Katherine L. Goldsmith Deputy Director



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INTRODUCTION

The Secondary Schools Pilot and Demonstration Project was initiated in July, 1969, as an extension of the Allied Health Professions Projects, a national curriculum research and development program funded by the U.S. Office of Education.

After a year of preliminary planning, preparation, and selection of the school-hospital-college complexes, the project got under way with its program in September, 1970. The pilot project is intended to develop and test a program which will motivate the student for upward mobility and prepare him for the world of work. The implementation has been attempted with respect to the functions of students, teachers, and other staff members, and an effort will be made to describe and test the program through the evaluation procedures.

The evaluation is being conducted by an educational research team headed by Dr. Clarence Fielstra of the UCLA Graduate School of Education and Miss Barbara Rosenquist of the Project staff. The method requires monitoring of the project's direction, and the major focus will be on student performance toward achieving stated objectives of the program. It will attempt, also, to identify unanticipated variables that are affecting the program as summarized. It will especially note the variables that are contributing to the success of the project and that, therefore, should be continued and strengthened.

It is anticipated that the results of this evaluation will provide a factual basis for improving the quality of Phase I of the Secondary Schools Pilot and Demonstration Program and that they will facilitate transition to the second phase of the project.

Diane E. Watson, M.S. Senior Associate Director of the Secondary Schools rilot Project



PROPOSED RESEARCH DESIGN

The research design proposed here is to be used in making an evaluative study of Phase I of the Secondary Schools Pilot and Demonstration Project for an Introduction to the Allied Health Professions. The instructional aspects of the project cover a three-year period. During the first year, 100 tenth grade students (25 in each of four high schools in the greater Los Angeles area) are being exposed to the broad range of health-care occupations, and they are being given opportunities to put into use at health-care facilities the basic skills which they are being taught relative to entry evel occupations in health care. When the students complete the firement of the program, they will proceed in the second year to a work-expent in a hospital under the supervision of a full-time coord on the third year of the instructional program, the students will be as the infinding health-care employment on a half-time basis (for school credit) while continuing their regular academic work during the remainder of the day.

Scope of Project Evaluation -- Phase I

During the first phase of the project, data will be collected and reported concerning the following:

A. Student participation in program

- 1. Criteria used for student selection
- 2. Process used in student selection
- 3. Reasons students applied for participation in program
- 4. Numbers of students who dropped program and reasons for doing so
- Numbers of students who continued in program and reasons for doing so



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- 6. Comparison of student participants with equated control group
 - a. In dropouts from school
 - b. In school attendance
 - c. In vocational maturity
 - d. In grade-point average
- B. Learning experiences afforded participants during first year of program
 - 1. Experiences afforded by the schools through use of specially designed curriculum
 - 2. Exploratory activities provided by the hospital and other health-care facilities
- C. General quality and effectiveness of first year of program
 - 1. Student opinion
 - 2. Teacher and school administrator opinion
- D. Student progress toward achievement of each of the performance objectives stated below:
 - 1. The student will demonstrate his ability to make an appropriate career choice in the field of allied health.
 - a. He will be able to describe job tasks (what workers do) in several allied health occupations.
 - b. He will be able to list the educational and training requirements for the occupations.
 - c. He will be able to describe the career ladder associated with each job, including entry and advanced positions.
 - d. He will be able to describe worker characteristics needed in various positions.



- 2. The student will demonstrate his ability to make tentative post-high school plans (occupational choices) that are realistic for him to pursue; and he will continue in an advanced education program and/or will be employed in an allied health occupation.
 - a. He will be able to describe a course of action (study) that will enable him to execute his career choice.
 - b. He will be able to initiate and carry through on a high school program of study that will include courses requisite to a career in allied health occupations.
- 3. The student will demonstrate ability to function as an employee within the health-care system.
 - a. He will demonstrate practical and theoretical knowledge of how health-care facilities operate.
 - b. He will be able to perform entry-level skills for selected allied health occupations.
 - c. He will be able to identify and describe the function of selected items of equipment used in allied health occupations.
 - d. He will demonstrate attitudes and behavior appropriate to the world of work.
- 4. The student will demonstrate that he is a knowledgeable consumer of the health-care system.
 - a. He will be able to identify the entry point to the appropriate health-care facility for a given health problem.
 - b. He will be able to give simple information about health-care facilities to peers, family, and community neighbors.



>

Sources of Relevant Data

Among the sources of data to be utilized in evaluating Phase I of the Secondary Schools Project are these:

- A. Data concerning the selection and characteristics of student participants in the project will be obtained from the records and reports made by staff members of the project, and comparisons of participants with an equated control group will be based on school records (cumulative files) as well as on project records.
- B. Descriptions of learning experiences provided students will be obtained from curriculum specialists, teachers, and appropriate hospital personnel; and these experiences will be evaluated in terms of their contribution to student progress in achieving stated objectives of the project.
- C. Opinions regarding the effectiveness of the project will be obtained through the use of evaluative forms submitted to students, teachers, school administrators, counselors, hospital personnel, project coordinators, and parents of participants.*
- D. Evidence of student progress toward achievement of stated objectives will be obtained from test results; critical incident reports; observations by teachers, administrators, counselors, parents, and selected members of other groups in the project.

*Examples of forms to be used in data collection are given in the appendix.

Transition from Phase I to Phase II of Project

On the basis of the findings and conclusions reached at the culmination of the evaluative study of Phase I of the Secondary Schools Project, recommendations will be made for the improvement of Phase I as it is to be operated during the second year of the project and for transition to Phase II (see Exhibit C) which begins in the second year. At the end of the second year of the project, Phase II will be extensively evaluated; and a reevaluation will be made of Phase I as it is repeated with improvements during that year. When the project is concluded, a comprehensive evaluation of the three-year pilot program will be made; and "guidelines" for developing and operating a similar program in other secondary schools will be presented.

EVALUATIVE STUDY

Secondary Schools Project, AHPP

Time Schedule, 1970

Task	Month
Publication of evaluative research design	February
Administration of critical incident instrument in the four classrooms (Fielstra and Rosenquist)	January and June
Collection and analysis of data regarding student selection, participation, etc. (Rosenquist)	February and June
Description of learning experiences afforded students in the schools and in the hospitals and health-care facilities (Curriculum specialists, teachers, et al.)	May
Collection and analysis of data regarding opinions about the general quality and effectiveness of the first-year program (Fielstra)	Меу
Collection and analysis of data regarding student progress toward achievement of performance objectives (Fielstra, Rosenquist, curriculum specialists, coordinators, et al.)	June (early)
Comprehensive data reduction and analysis for use in evaluation report (Fielstra and Rosenquist)	July
Completion of draft report and revisions thereof (Fielstra)	July
Publication and distribution of final version of evaluation report (Staff)	August



>

APPENDIX

SECONDARY SCHOOLS PROJECT, AHPP

Critical Incident Report

Directions to student:

During the past semeste: you have done many things in the Secondary School Project. As you recall these experiences, do you remember some of them that were much more interesting and much more useful to you than the other experiences in the Project?

In the spaces provided, will you please very briefly describe the one most interesting and useful experience you had in the Project at school and the one most interesting and useful experience you had in the Project at a hospital or health facility:

My Most Interesting and Useful Experience in the Project at School



My Most Interesting and Userul Experience
in the Project at the Hospital
or Health Facility

Now, please think again about your experiences in the Project. Do you recall some that were less interesting and less useful than others?

In the spaces provided, will you please very briefly describe the one <u>least interesting and least useful</u> experience you had in the Project at <u>school</u> and the one <u>least interesting and least useful</u> experience you had in the Project at the <u>hospital</u> or <u>health facility</u>:

My Least Interesting and Least Useful Experience in the Project at School

ERIC

My Least Interesting and Least Useful Experience in the Project at the Hospital or Health Facility

SECONDARY SCHOOLS PROJECT, AHPP

Student's Evaluative Opinions*

Directions to student:

In the left-hand column below are questions about what you have learned in the Secondary Schools Project this year. In the right-hand column are spaces for you to check your answers. Please place a check mark () in the space that best describes the amount of progress that you think you have made.

This is not a test. There are no right or wrong answers. Do not sign your name.

	Questions	Progress this Year
		(Check only one answer for each question.)
1.	How much progress have you made in developing your ability to tell what workers do in several allied health occupations?	NoneLittleQuite a bitMuchDon't know
2.	How much progress have you made in developing your ability to explain steps necessary to enter an allied health job, including the training and educational background needed?	NoneLittleQuite a bitMuchDon't know

*With appropriate variations, this form will also be used for collecting evaluative opinions from teachers and parents.



3.	How much progress have you made in developing your ability to make a wise occupational choice?	NoneLittleQuite a bitMuchDon't know
4.	How much progress have you made in developing your ability to demonstrate knowledge of how health-care facilities operate?	NoneLittleQuite a bitMuchDon't know
5.	How much progress have you made in developing your ability to perform basic skills in selected allied health occupations?	NoneLittleQuite a bitMuchDon't know
6.	How much knowledge have you gained about how health-care facilities operate?	NoneLittleQuite a bitMuchDon't know

ERIC Full Tox t Provided by ERIC

7.	How much progress have you made in your ability to identify and describe the uses of specific equipment in the health-care system?	NoneLittleQuite a bitMuchDon't know
8.	How much have you improved your behavior appropriate to the world of work (dependability, attendance, personal appearance, etc.)?	NoneLittleQuite a bitMuchDon't know
9.	How much have you gained in your ability to maintain your own health through the use of appropriate health care?	NoneLittleQuite a bitMuchDon't know
15.	How much have you gained in your ability to give your family and friends helpful information about health-care facilities?	NoneLittleQuite a bitMuchDon't know

SECONDARY SCHOOLS PROJECT, AHPP

Student's Occupational Plans

Directions to student:

You may have decided on the occupation you are going to enter, or you may not yet have made such a decision.

If you have decided, write your occupational choice at the top of the attached sheet of paper, and then list the steps you will have to take to enter it. For example:

Policeman

- 1. Take a general course in high school.
- 2. Pass police qualifying examination.
- 3. Go to Police Academy for training.

If you have not decided, write about why it has been hard for you to make a choice and what you plan to do about it. Have you thought about a lot of occupations, or just a few? Have you talked to anyone about choosing an occupation, or not? How long do you think you can wait before you make a choice? Write about these questions and anything else that comes to mind about choosing an occupation.



SECONDARY SCHOOLS PROJECT, AHPP

Student Evaluation of Hospital Experience *

			DATE:
ARTMENT:			
Was this visit	Interesting?		
			· · · · · · · · · · · · · · · · · · ·
How would you ra	ate your perform	ance?	Poor
Do you feel you How	could have been	better prepare	ed for this visit?
Would you like	o return to thi		Why?
The state of the s			
	Was this visit is What tasks did y How would you ra Excellent Do you feel you How	What tasks did you learn in this How would you rate your perform Excellent Good Do you feel you could have been how?	What tasks did you learn in this department?



^{*} With appropriate variations, this form will also be used for collecting evaluative opinions from supervisors in the hospitals visited by the students.

ALLIED HEALTH IS SECONDARY SCHOOLS INTRODUCTI ::

FUNCTIONAL (

PRELIMINARY PHASE
APRIL 1969 - SEPT. 1970

FIRST YEAR OF II SEPT. 1970 - I

STAFF

ASSOCIATE DIRECTOR
Oversees project.
Coordinates with AHPP.
Supervises staff.

FIELD COORDINATORS (4)
Work with hospitals
to develop schoolcommunity relations.

Develop work-experience curriculum.

CURRICULUM SPECIALISTS (2)
Responsible for curriculum development.

CONSULTANT

RESEARCH ANALYST

SECRETARIES (2)

PARTICIPATING AGENCIES

- 4 Hospitals
- 4 High Schools
- 4 Adjacent Junior Colleges

SCHOOL COUNSELOR ORIENTATION

Orientation to goals and purpose of the program.

Enlisting cooperation.

WORK EXPERIENCE SUMMER PROGRAM

4 students and 4 teachers, one from each participating school, to work in hospital during the summer.

Teachers to assist in curriculum writing.

HOSPITAL STAFF ORIENTATION

Special needs of the project and its students analyzed.

PILOT AND DEMONSTR:
YEAR I
BASIC INTRODUCTI

Two-hour daily sche of school time.

One year in duratic: .

Exploratory work exill units of credit.

Academic material so with visual aids and

Class - open to studion 10th grade.

25 students per clas

Teacher to accompany into the field.

Students - a heterogroup including all groups, income group

Total students invol

Total teachers invol

TUTORING

Students who need assistance will by teacher-aid volunteers.

EVALUATI I

Summary and for evaluation. To at quarterly

PREPARATION OF PHOTOPLES



FIRST YEAR OF INSTRUCTION SEPT. 1970 - SEPT. 1971 SECOND YEAR OF INSTRUCTION THIRD YEAR OF INSTRUCTION SEPT. 1971 - SEPT. 1972 - SEPT. 1973 End of Funding

PILOT AND DEMONSTRATION PROJECT YEAR T BASIC INTRODUCTION TO AHP

Two-hour daily scheduled block of school time.

One year in duration.

Exploratory work experience, 10 units of credit.

Academic material supplemented with visual aids and field trips.

Class - open to students in the 10th grade.

25 students per class.

Teacher to accompany students into the field.

Students - a heterogeneous group including all ability groups, income groups, and races.

Total students involved - 100.

Total teachers involved - 4.

TUTORING

Students who need remedial assistance will be helped by teacher-aide and other volunteers.

EVALUATION

Summary and functional evaluation. Reporting at quarterly intervals.

PREPARATION FOR PEFEAT OF PHOT PROJECT YEAR I PILOT PROJECT YEAR I (REPEAT)

Another group of 100 students assist other schools in establishing program.

PILOT PROJECT YEAR II

Paid work experience program.

Coordinated by schoolproject staff.

Specialized training in one of the three areas of occupational training.

Coordinate with hospital in-service training.

Curriculum packages from AHPP where applicable.

EVALUATION

Report of Year I Project

CURRICULUM PACKAGE

Reproduced and distributed.

TUTORING PROGRAM CONTINUES

PREPARATION OF PILOT PROJECT YEAR III

PREPARATION FOR PILOT PROJECT YEAR II (REPEAT)

PREPARATION FOR FILOT PROJECT YEAR I (REPEAT)

PILOT PROJECT YEAR I (REPEAT)

Additional group of 100 students.

PILOT PROJECT YEAR II (REPEAT)

Group continued.

PILOT PROJECT YEAR III

Work experience project: student able to be employed after school hours as well.

Structured program for LVN's and possibly technicians.

> TUTORING PROGRAM CONTINUES

CONTINUING EVALUATION AND SUMMARY

> PUBLICATION OF TOTAL PROGRAM

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EXHIBIT B

and Secondary School Basic Introduction to Allied Health Professions Projects Allied Health Occupations ORGANIZATIONAL CHART

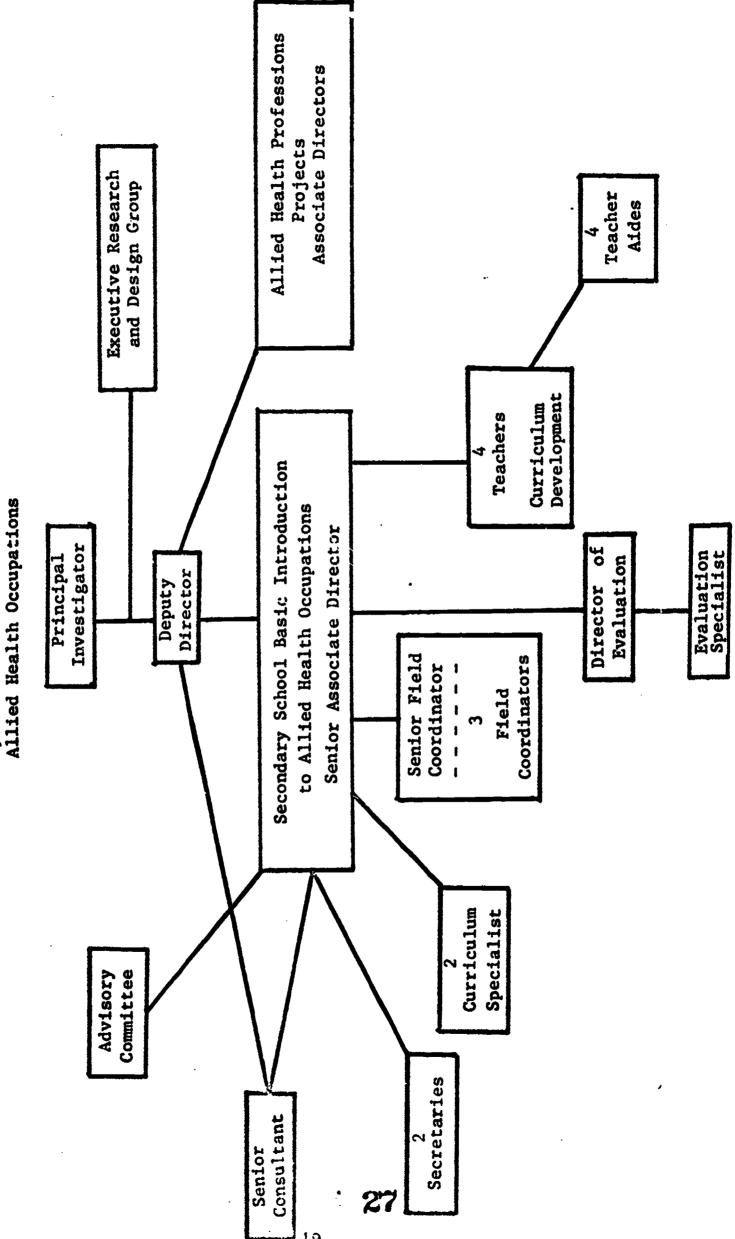




EXHIBIT C

STAFF LIST, SECONDARY SCHOOLS PROJECT

Melvin L. Barlow, Ed.D., Principal Investigator and Director Katherine L. Goldsmith, Dr. P.H., Deputy Director Diane E. Watson, B.A., M.S., Senior Associate Director Clarence Fielstra, Ph.D., Director of Evaluation

Phyllis Agran, M.S., M.P.H., Curriculum Specialist Doris Rosenthal, M.A., M.P.H., Curriculum Specialist

William Hudson, B.S., Senior Field Coordinator
Marilyn Ray, M.P.H., Field Coordinator
Gregory Threadgill, B.S., Field Coordinator

Shirley Majchrzak, M.S., Consultant
Barbara Rosenquist, M.S., Research Analyst

Marcelin Fortain, B.A., Project Teacher

Elaine Hadden, B.S., Project Teacher

May Kishiyama, B.A., M.A., Project Teacher

Maude Peronneau. B.S. R.N., Project Teacher

Charlotte Amundsen, Teacher Aide

Judy Dobson, Secretary

Margaret Campbell, Secretary

Mary Ellison, Editor



Staff List, Secondary Schools Project (Continued)

St. Francis Hospital-Fremont High School Complex

Ralph Miller, Training Director
Donald Bolton, Principal
Richard Browning, Vice Principal
Phyllis Smith, Head Counselor
Maude Peronneau, Teacher
Gregory Threadgill, Field Coordinator

Harbor General Hospital-Jordan High School Complex

Les Smith, Assistant Administrator Ralph Watt, Training Director Lionel Joubert, Principal John DeBoise, Head Counselor Elaine Hadden, Teacher William Hudson, Field Coordinator

Cedars-Sinai Medical Center-Lincoln High School Complex

Paul Rubenstein, Director of Professional Services
Jan Costa, Training Director
Leonard Swartzman, Director of Medical Education
Peter Martinez, Principal
Lawrence Arellanes, Head Counselor
May Kishiyama, Teacher
Marilyn Ray, Field Coordinator

St. Mary's Hospital-Long Beach Polytechnic High School Complex

Anthony Abbott, Vice President, Personnel Beverly Bohaty, Personnel Director Jack DeBose, Principal Don Menke, Head Counselor Marcelin Fortain, Teacher

Martin Luther King, Jr. Hospital

Harry Douglas, Personnel Director Tom Hawkins, Training Director

Kaiser Permanente-Harbor City

Don Martine, Training Director Ed Bunting, Clinic Administrator



EXHIBIT D

COMPLEXES PARTICIPATING IN SECONDARY SCHOOLS PROJECT

The following complexes have been selected and prepared for participation in the evaluation.

- St. Francis Hospital (1970-1971)
 Martin Luther King, Jr. Hospital (1971-1972)
 Fremont High School
 Southwest Junior College
- 2. Cedars-Sinai Medical Center Lincoln High School Los Angeles City College
- 3. Harbor General Hospital Jordan High School Compton Junior College
- 4. Kaiser Permanente (proposed participation)
 St. Mary's Hospital, Long Beach
 Polytechnic High School, Long Beach
 Long Beach City College



Exhibit E Allied Health Professions Projects Career Lattice

I. Patient Care

Nurse Aide Nursing Asst. Psychiatric Tech. RN
Nursing Educator Nursing Administrator

Rehabilitation Aide

Certified Physical Therapist Aide
Physical Therapist
Occupational Therapy Asst.
Occupational Therapist

Social Service Aide Case Worker Aide Community Health Worker Community Health Tech. Social Worker Asst.

Mental Health Aide

Mental Health Aide

Mental Health Technician

Mental Health Technologist

Home Health Aide ---- Home Health Asst. ---- Home Health Tech.

II. Technical & Clinical Occupations

Pharmacy Aide --> Pharmacy Tech. --> Pharmacist

Surgical Equip. Aide Surgical Nursing Aide Surgical Tech.

Cardiopulmonary Aide Cardiopulmonary Technician Cardiopulmonary Technologist

Dental Aide ---> Dental Asst. ---> Dental Hygienist ---> Dental Asst. Educator



II. Technical & Clinical Occupations (continued)

Electroencephalographic Aide -- > Electroencephalographic Tech.

Inhalation Therapist Aide Inhalation Therapist Technologist.

Lab Aide --- > Certified Lab Aide --- Medical Technologist

Animal Lab Aide Animal Lab Asst. Animal Lab Technologist

Radiology Aide ---> Radiology Tech. ---> Radiation Health Tech.

III. Facilities Support

Porter, Janitor, Maid ---- Cleaning Specialist --- Shift Supervisor

Lead Man ----> Asst. Housekeeper ----> Executive Housekeeper

Laundry Room Worker --> Inspector --> Area Supervisor --> Laundry Manager --> Laundry Manager

Linen Worker >Seamstress >Inspector --> Supervisor > Inspector --> Supervisor

Central Service Worker ---> Supervisor ---> Journeyman

Engineer Helper——>Apprentice ——> Superintendant (Engineering and Chief Engineer Maintenance) —,

Asst. Environmental Worker Environmental Tech. Environmental Engineer Facility Planning Manager

Clerical Aide -> Messenger --- > Medical Office Worker --- > Receptionist -> File Clerk --- > Ward Clerk --- > Unit Manager



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III. Facilities Support (Continued)
      Clerk Typist ---> Medical Secretary ---> Medical Executive Secretary
                      Medical Transcriptionist --- Medical Records Clerk ---
                      Medical Records Librarian
      Business
                      Data Processing Clerk—>Key Punch Operator -
       Office Aider
                         Cashier ---- Record Keeper ---- Credit Manager
                         Posting Machine Operator --> Bookkeeper
                        9Accountant ---> Comptroller
                        Accounts Payable Clerk -- > Accounts Receivable Clerk -- > Passt. Business Manager --- > Business Manager --- >
                        Budget Analyst
                         Admitting Clerk --- Admitting Supervisor
                        Coding Clerk ---> EDP Clerk ---> Data Processor ---
                         Programmer
                       Clerk --> Payroll Clerk ---> Personnel Interviewer ----> Asst. Training Officer --> Personnel Officer
                       >Training Officer
       Storeroom Clerk ---> Distribution Clerk ---> Receiving Clerk --->
                           -> Asst. Purchasing Agent- -> Buyer (---
       →Inventory Clerk-
     Purchasing Agent
        Cook Trainee - → Cook → Senior Cook → Senior Cook → Dietician
                           Sair Supervisor -> Food Service Supervisor ->
```

Grood Service Manager --- General Services Manager

